

Message

From: Marie-Amelie Petre [mcpetre@ncsu.edu]
Sent: 10/24/2019 7:49:33 PM
To: Strynar, Mark [Strynar.Mark@epa.gov]
CC: David Genereux [genereux@ncsu.edu]
Subject: Re: Strynar contact and info
Attachments: ATT00001.txt; Koropecj-Cox thesis June2019 ss.pdf

Good afternoon Mark,

It was a pleasure to meet you, thank you for sharing this information! Dave and I did not know about Dr Zamora's research work and it looks like he is mostly investigating the hyporheic flux, which is a good complement to our work. Indeed, we collect water sample about 30cm beneath the streambed of the Cape Fear River tributaries to ensure that it is groundwater (and not stream water circulating in the hyporheic zone).

Following Dave's presentation yesterday, I am attaching the M.S. thesis of his graduate student (Lydia Koropecj-Cox) who recently started a fellowship appointment at EPA in RTP.

Best,

Marie-Amelie

Marie-Amélie Pétré, Ph.D.

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On Thu, Oct 24, 2019 at 2:39 PM Strynar, Mark <Strynar.Mark@epa.gov> wrote:

Marie-Amelie,

It was nice to meet you at the PFAS summit and have some discussions about this topic. Here is my contact info. Please share with your NCSU colleagues

Also find below my correspondence with Peter Zamora at UNCW on PFAS in the lower Cape Fear and some associated attachments I was sent.

Cheers,

Mark

Hi Mark,

Sure (see attached), the other 2 figures are from Hanks masters thesis, which he is currently writing up. The initial sampling at Elizabethtown (analysis done by SGS from summer 2018 samples) where the ones that

showed higher concentrations. The genx2 figure were from March this year (analysis done at UNCW, Dr. Loh's Lab based on Nakayama2010) all samples are below 60 ng/L, if our 2 analytical procedures are comparable it looks like we may be flushing the banks through hyporheic exchange. We will resample our Elizabethtown sites this month to verify the change in concentration from 2018.

Below is the complete list of analytes from SGS

Client Sample ID: **THP-UP1**

Lab Sample ID: 31800830001-A Parameter Result Units

EPA 537 v1.1 PFBA 17.6 ng/L

PFPeA 66.6 ng/L

PFHxA 53.3 ng/L

PFHpA 47.1 ng/L

PFOA 147 ng/L

PFNA 22.8 ng/L

PFBS 15.3 ng/L

PFHxS 51.6 ng/L

PFHpS 5.81 ng/L

PFOS 102 ng/L

NMeFOSAA 14.9 ng/L

NetFOSAA 7.55 ng/L

GenX HFPO-DA (GenX) 492 ng/L

Client Sample ID: **THP-LP1**

Lab Sample ID: 31800830002-A Parameter Result Units

EPA 537 v1.1 PFBA 16.1 ng/L

PFPeA 57.8 ng/L

PFHxA 36.5 ng/L

PFHpA 33.4 ng/L

PFOA 73.2 ng/L

PFNA 7.03 ng/L

PFBS 10.6 ng/L

PFHxS 25.4 ng/L

PFOS 12.9 ng/L

GenX HFPO-DA (GenX) 344 ng/L

Best,

Peter

From: Strynar, Mark <Strynar.Mark@epa.gov>

Sent: Tuesday, October 1, 2019 3:13 PM

To: Zamora, Peter B. <zamorap@uncw.edu>; McCormick, Henry Dewey <hdm5390@uncw.edu>

Subject: presentation at GSA

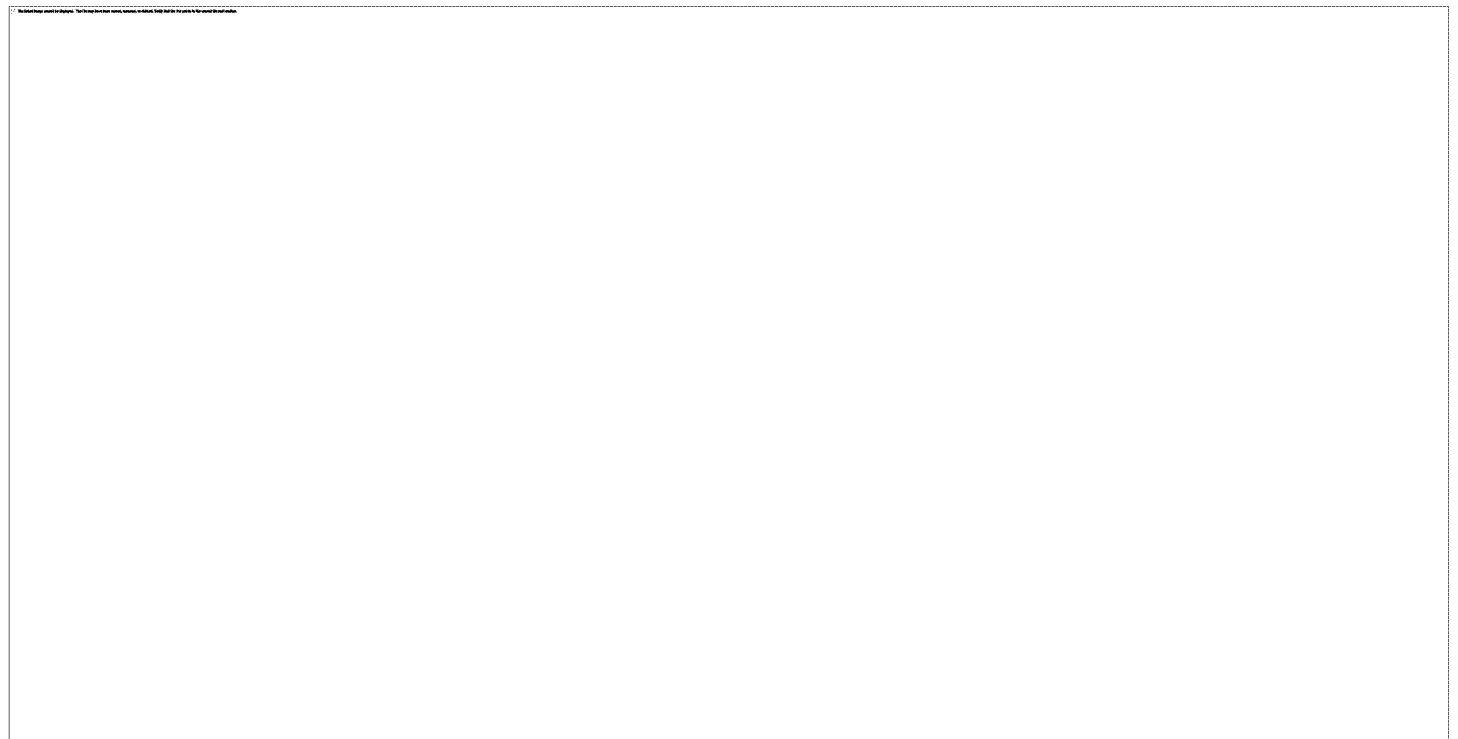
Hank and Peter,

I came across your presentation for the GSA meeting. <https://gsa.confex.com/gsa/2019SE/webprogram/Paper327518.html>

I am very interested in what you saw for the GenX in the GW taken from adjacent to the banks. If you could share your poster or slides with me I would appreciate it. The numbers you saw for GenX were quite high. In my work with Detlef Knappe at NC State back a number of years ago on the Cape Fear river we expect these concentration were up in the 1000 to 1500 ng/L at the water plant in Wilmington (Sweeney) however the water is drawn from above Lock and Dam #1 for that plant. If what you suggest is true, this would be a very good explanation as to why GenX and other PFAS are in the river, when the source (pipe at least) has been cut off.

I am also interested in what analytes you have looked for beyond GenX. In my experience PFMOAA <https://comptox.epa.gov/dashboard/dsstoxdb/results?search=DTXSID00408562> and PFOxHxA <https://comptox.epa.gov/dashboard/dsstoxdb/results?search=DTXSID50892351> were always way higher in concentration (see below).

This was what was found in the Dupont effluent in October of 2011.



Thanks.

Mark

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